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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/682,314	08/17/2001	James Kenneth Aragonés	RD-28217	2332

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GENERAL ELECTRIC COMPANY (PCPI)
C/O FLETCHER YODER
P. O. BOX 692289
HOUSTON, TX 77269-2289

EXAMINER

CRAIG, DWIN M

ART UNIT	PAPER NUMBER
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2123

DATE MAILED: 03/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/682,314	Applicant(s) ARAGONES ET AL.	
	Examiner Dwin M. Craig	Art Unit 2123	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 December 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-93 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-93 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-93 have been presented for reconsideration based on Applicants' amended claim language and arguments.

Response to Arguments

2. Applicant's arguments filed 12/27/2005 have been fully considered but they are not persuasive. Applicant opined on page 19 of the 12/27/2005 responses that the *Weinstock* fails to teach, "*building an engine baseline model for an ideal engine.*" The Examiner respectfully traverses Applicants' arguments. Applicants' specification and arguments have failed to specifically define the meaning of what an *ideal* engine baseline model is supposed to be such that a reasonable interpretation of the term reads past the definition of a baseline model as disclosed by *Weinstock*. Further, it is noted by the Examiner that in Applicants' specification the section labeled "*Background of the Invention*" discloses, "*Typically, engine baseline models are developed from data gathered from thermodynamic cycle analyses and simulation. First, models of ideal values are created, indexed by variables such as altitude, temperature, power setting, and air speed.*" This section infers that *ideal* baseline models are known in the art. The Examiner fails to see any clear definition of the term *ideal* such that it reads past the disclosed teachings of a baseline model as disclosed in *Weinstock*.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35

U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Independent Claims 1, 9, 15, 18, 19, 22, 30, 36, 39, 40, 46, 54, 60, 63, 64, 70, 78 and 86 and dependent Claims 2, 4-6, 8, 10, 12, 13, 16, 20, 23, 25-27, 29, 31, 33, 34, 37, 42, 44, 45, 47, 49-51, 53, 55, 57, 58, 61, 66, 68, 69, 71, 73-75, 77, 79, 81-83, 85, 87, 89-91 and 93 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Weinstock et al. U.S. Patent 6,223,143** in view of **Aragones et al. U.S. Patent 6,067,486**.

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3.1 As regards Independent Claims 1, 9, 15, 18, 19, 22, 30, 36, 39, 40, 46, 54, 60, 63, 64, 70, 78 and 86 and using Independent claim 1 as an example, the *Weinstock et al.* reference discloses building/generating a baseline *ideal* model (Figure 1 item 18-3, Figure 3 item S20, Figure 16 item S1102, Col. 3 lines 13-22, Col. 9 lines 62-67, Col. 10 lines 1-13, Col. 20 Lines 16-24, Col. 24 lines 22-39), using an aircraft engine model (Col. 22 Lines 23-54), and preprocessing the data (Col. 10 Lines 46-62), using a database (Col. 5 lines 63-67, Col. 6 Lines 1-5) using regression analysis (Col. 11 Lines 54-59, Col. 28 Lines 34-37) and grouping the resulting data (Col. 21 Lines 5-22).

However, the *Weinstock et al.* reference does not expressly disclose using a *service history database*.

The *Aragones et al.* reference discloses, using a service history database (Figures 1 and 2 Col. 1 lines 60-67, Col. 2 Lines 1-5, Col. 2 lines 59-67, Col. 3 lines 1-25).

It would have been obvious, to one of ordinary skill in the art, at the time the invention was made to have provided for a Aircraft service history database because, *there is a need for a system which reduces the time and effort in collecting and maintaining information regarding an aircraft engine and service requirements, and which allows the service manager to plan repair and overhaul of the aircraft engine in less time with increased accuracy thereby reducing cost for repair of the aircraft engine* (Col. 1 lines 52-57 *Aragones et al.* US Patent 6,067,486).

3.2 As regards dependent Claims 2, 4-6, 8, 10, 12, 13, 16, 20, 23, 25-27, 29, 31, 33, 34, 37, 42, 44, 45, 47, 49-51, 53, 55, 57, 58, 61, 66, 68, 69, 71, 73-75, 77, 79, 81-83, 85, 87, 89-91 and 93, the *Aragones et al.* reference discloses data acquisition (Figure 1 items 60 and 16) and

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plurality of groups (**Figure 1 items 120**) and display of data (**Figure 1 items 60 and 18**), as regards the motivation to combine the references please see section 3.1 of this Office Action.

The *Weinstock et al.* reference discloses using a regression model (**Col. 11 Lines 54-59, Col. 28 Lines 34-37**).

4. Dependent Claims 3, 7, 11, 14, 17, 21, 24, 28, 32, 35, 38, 41, 43, 48, 52, 56, 59, 62, 65, 67, 72, 76, 80, 84, 88 and 92 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Weinstock et al. U.S. Patent 6,223,143** in view of **Aragones et al. U.S. Patent 6,067,486** and in further view of **Keeler et al. U.S. Patent 6,243,696**.

4.1 It is also noted that both the *Weinstock et al.* and *Argones et al.* references do not expressly disclose *cleaning* data.

The *Keeler et al.* reference discloses *cleaning* data (**Figures 7a-7e, Col. 3 Lines 23-25**), the *Keeler et al.* reference also discloses building/generating a model (**Figure 38 and Figure 39 item 486**), using a database (**Figure 38 items 450 & 452**).

It would have been obvious, to one of ordinary skill in the art, at the time the invention was made to have used the teachings in the *Keeler et al.* reference because of the risk of having incoherent or missing data in the regression model can lead to erroneous results (**Col. 1 lines 15-67 and Col. 2 Lines 1-31 Keeler et al. US Patent 6,243,696**).

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dwin M. Craig whose telephone number is (571) 272-3710. The examiner can normally be reached on 10:00 - 6:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul L. Rodriguez can be reached on (571) 272-3753. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DMC


Paul L. Rodriguez
Supervising Primary Examiner
Art Unit 2123-2123 3/10/06